

Fetal Death Rate — Fetal deaths (stillbirths) per 1,000 deliveries (live births plus fetal deaths).

Neonatal Death Rate — Deaths under 28 days per 1,000 live births.

Postneonatal Death Rate — Deaths 28 days to 1 year per 1,000 neonatal survivors (live births minus neonatal deaths). Data cover only the four birth years 1979-1982 because 1984 postneonatal deaths among the 1983 birth cohort are not yet complete.

Infant Death Rate — Deaths under 1 year per 1,000 live births. For the reason cited above for postneonatal deaths, infant death rates cover only the four birth years 1979-1982.

Percent Change — A “p-value” given in parentheses in Tables 10-14 indicates the level at which the difference between the beginning and ending rates is statistically significant, i.e., the chances that the measured difference does not represent a “true” difference are less than 5 in 100 ($p < .05$) or 1 in 100 ($p < .01$). The absence of a p-value indicates that the difference is not statistically significant even though the absolute difference in rates may be large. This circumstance occurs when the numbers of events are not sufficiently large to support findings for a “true” difference.

Birth Characteristics and Infant Outcome

Separately for blacks, whites, and American Indians, Tables 3-6 show annual numbers and multi-year numbers and rates for categories of live births and fetal, neonatal, and postneonatal deaths. As shown by the 1979-83 percentages of Table 3, Indians were more likely than whites but less likely than blacks to have a low-weight infant, to be of low maternal age (under 18), or to give birth out of wedlock; these differences are all statistically significant at $p < .01$. However, Indian mothers were more likely than either black or white mothers to be poorly educated ($p < .01$) and more likely than white mothers to be of high parity or to have had one or more previous liveborn infants to die ($p < .01$). Taken as a whole, maternal risk factors were present among 70% of Indian mothers versus 44% of white mothers and 73% of black mothers. Each of these differences is statistically significant at $p < .01$.

Comparing the 1979-83 fetal death rates of Table 4, the Indian rate is found to be significantly higher than the rate for whites ($p < .05$) and significantly lower than the rate for blacks ($p < .01$). At mature weights (2500+ grams), however, the Indian rate was significantly higher than either the white or black rate ($p < .05$). For the several

maternal characteristics examined, the Indian fetal death rate was significantly higher than the corresponding white rate for mothers 18-34, mothers who were married, and mothers with no history of a previous liveborn who died. Finally, among mothers with one or more risk factors, the fetal death rate for Indians was higher than that for whites but significantly lower than that for blacks ($p < .05$).

Examining the neonatal death rates of Table 5, the total Indian rate is again found to be significantly higher than the rate for whites ($p < .01$) and significantly lower than the rate for blacks ($p < .05$). However, at weights under 1500 grams and 2500+ grams, the Indian rates exceeded those of both whites and blacks, though not significantly. The reader will also note the high rate among white infants weighing 1500-2499 grams; that rate (23.9) is significantly higher than the black rate (14.5) at $p < .01$. Meanwhile, among mothers with one or more risk factors, the neonatal death rate is found to be significantly lower for Indians than for blacks ($p < .01$).

Finally, from Table 6, the postneonatal death rate of Indians is found to be particularly excessive, the excess over the white rate being statistically significant at a very high level ($p < .001$). Compared to either whites or blacks, an Indian excess is noted in *all* weight and maternal categories, and the Indian-white differences are significant for all categories involving 10 or more Indian deaths. Significant Indian-black differences are also observed among mothers under 18 and parity 1 mothers; the difference among mature-weight infants barely misses statistical significance.

To summarize the data of Tables 3-6:

- Low education (under 9 and 9-11 years) is far more prevalent among Indian mothers (47%) than among white mothers (25%) or black mothers (36%).
- Comparing levels of prematurity, births under age 18, births out of wedlock, and fetal and neonatal mortality, Indian rates are significantly higher than those of whites and significantly lower than those of blacks.
- At mature weights (2500+ grams), Indian fetal and neonatal death rates are higher than those of both blacks and whites; the fetal death rate differences are statistically significant.
- At low levels of education, the fetal and neonatal death rates of Indians are more like those of whites than those of blacks.